

the gill-filaments while here they cross them obliquely. Moreover, the septa of the *Unionidæ* are much more closely set (chiefly in the females), and much more regular.

Margaritana monodonta differs by this structure markedly from all species of *Margaritana* I know. I have seen the typical *Margaritana*-structure not only in *Margaritana margaritifera* (L.) (both from Europe and northeastern America), but also in two specimens of *Margaritana sinuata* (Lam.) (= *crassa* Simpson, 1, c. p. 678) from near Perpignan, France (sent to me by Mr. W. Israël), and in a number of specimens of *Margaritana hembeli* (Conr.) from southern Alabama (I am obliged to Mr. H. H. Smith for these). While I thus consider these three species as congeneric (the creation of *Pseudunio* for *sinuata* by Haas notwithstanding), *M. monodonta* differs from them in an important structure, which undoubtedly represents a higher specialization, a forward step in evolution, and it is, as I believe, entitled on this account to the rank of a separate genus, which I propose to call *Cumberlandia* (Type: *monodonta* Say).

As to the distribution of *Cumberlandia monodonta*, Walker's papers should be consulted (Pr. Mal. Soc. 9. 1910 pp. 137-139, and NAUTILUS, 25. 1911 p. 57-58). According to this, the metropolis of it seems to be in the Cumberland and Tennessee Rivers, but it has spread into the lower Ohio drainage, and into Indiana and Illinois. In the Ohio, it was not known, up to the present, above Cincinnati: but I may mention here, that I found last summer (July 13, 1911) a dead specimen of *Cumberlandia monodonta* in the Ohio River at Buffington Island, near Portland, Meigs Co., Ohio. I also may add, that according to the experience gained by my last year's collecting, it is entirely excluded that this species occurs anywhere in the Big Sandy or Great Kanawha Rivers, and that I do not think that it reached its present range by coming "down" the Ohio. But this will be discussed elsewhere.

ADDITION TO THE LIST OF MOLLUSCA FROM MONTE SANO, ALABAMA.

BY. H. E. WHEELER.

Through the kindness of Prof. Herbert H. Smith, conchologically the "discoverer" of Monte Sano, and Mr. George H. Clapp, who

determined the collections from this region, I am able to make the following additions to the list published in the March number of the NAUTILUS for the current year. It should be noted that some of the species listed then and now were not found on the mountain proper, but, living on the foothills or in the adjacent valleys, are entitled to enumeration in the fauna of the region.

Polygyra auriformis, Bld. This and the species *clausa* are low land shells, collected near the base of the mountain.

Polygyra pustuloides, Bld. Near Huntsville, and also on the mountain.

Polygyra tridentatu Say. "Common in the whole region, and probably on the table land of the Mountain." Smith.

Polygyra clausa Say.

Polygyra hirsuta Say. Typical *hirsuta* is found on Monte Sano according to Clapp.

Strobilops virgo Pils.

Bifidaria contracta Say.

Bifidaria corticaria Say.

Bifidaria pentodon Say.

Bifidaria pentodon gracilis Sterki.

Bifidaria clappi Sterki. See NAUTILUS, Vol. XXII, pp. 108, 109. Sterki gives Huntsville, Alabama as one of the type localities. Clapp has it also from Monte Sano.

Vertigo milium Gld.

Vertigo rugosula oralis Sterki. "In the Huntsville region, and almost surely from the mountain." (Smith).

Vertigo gouldii Binn.

Cochlicopa lubrica morseana P. From the western part of Vincent Mountain. This is one of the numerous connected spurs of the same mountainous chain, and the species is likely to be found on Monte Sano in suitable situations.

Omphalina pilsbryi Clapp. See NAUTILUS, Vol. XVIII, p. 30. Collected by the writer at Normal, several miles north of Huntsville, Alabama, and by Smith on Monte Sano.

Euconulus chersinus dentatus, Sterki. "More correctly a 'form'; certainly not a variety." (Smith).

Gastrodonta intertexta Binn. Collected by the writer at Huntsville, and by Prof. Smith on the mountain.

Gastrodonta acerra Binn. Huntsville region. Should be found on the mountain.

Punctum blandianum Pils.

Pyramidula cumberlondiana, Lea. Rarely at the southern end of Monte Sano. This record, furnished by Smith, cancels the negative note in previous article.

There is a variety of *Pyramidula alternata*, Say, which is quite constant, distinguished principally by its sub-carinate contour, which was collected on an isolated peak (Ward's Mountain?) three miles south west of Huntsville.

Pyramidula sub-sp. nov. (Pilsbry). A splendid sub-species of *bryanti* which has been described by Dr. Pilsbry, but not yet published. Locality a dry ridge about 6 miles north of Monte Sano.

Succinea avara Say. Reported by Clapp.

Carychium exiguum Say. "Associated with *exile*, H. C. Lea, but rare and local." (Smith).

LAND SHELLS OF SOUTHERN FLORIDA.

BY E. G. VANATTA.

This list is based upon shells picked from leaf-mould collected in Florida by Messrs. Clarence B. Moore, H. A. Pilsbry, C. T. Simpson, Stewardson Brown, H. W. Fowler, and J. S. Raybon.

All are in the collection of the Academy of Natural Sciences.

Many of the specimens of *Truncatella bilabiata* are a rather smooth form parallel to *T. c. succinea* Ad.

The typical *Polygyra cereolus* Mühl. were at first divided by size from the var. *carpenteriana* Bld., but these two forms intergrade as shown by the following count of specimens in a large series from two localities. In a lot from Little Pine Key there are 46 *Polygyra cereolus* measuring from 14.5 to 10.5 mm.; 700 *Polygyra c. carpenteriana* measuring 10.3 to 7.5 mm., and 40 measuring 8.3 to 7 mm. in diameter.

From Big Pine Key at Robert Watson's place there are 12 *P. cereolus* measuring 14.5 to 11 mm. in diameter; 1009 var. *carpenteriana* measuring 11.3 to 9 mm., and 16 from 9 to 7 mm. It will be seen that no definite division can be made. Each of these lots represents a single colony, the snails being scraped up with the dirt, without selection, from under stones in an area of a square rod or two.